

Annexes

Original

Annexes / Battistoni, C., GIRALDO NOHRA, C.. - STAMPA. - Systemic Design Method Guide for Policymaking: a Circular Europe on the way. Volume 1:(2017), pp. 145-177.

Availability:

This version is available at: 11583/2696472 since: 2018-01-10T11:46:31Z

Publisher:

Umberto Allemandi

Published

DOI:

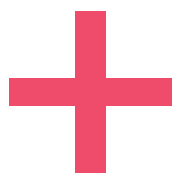
Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)

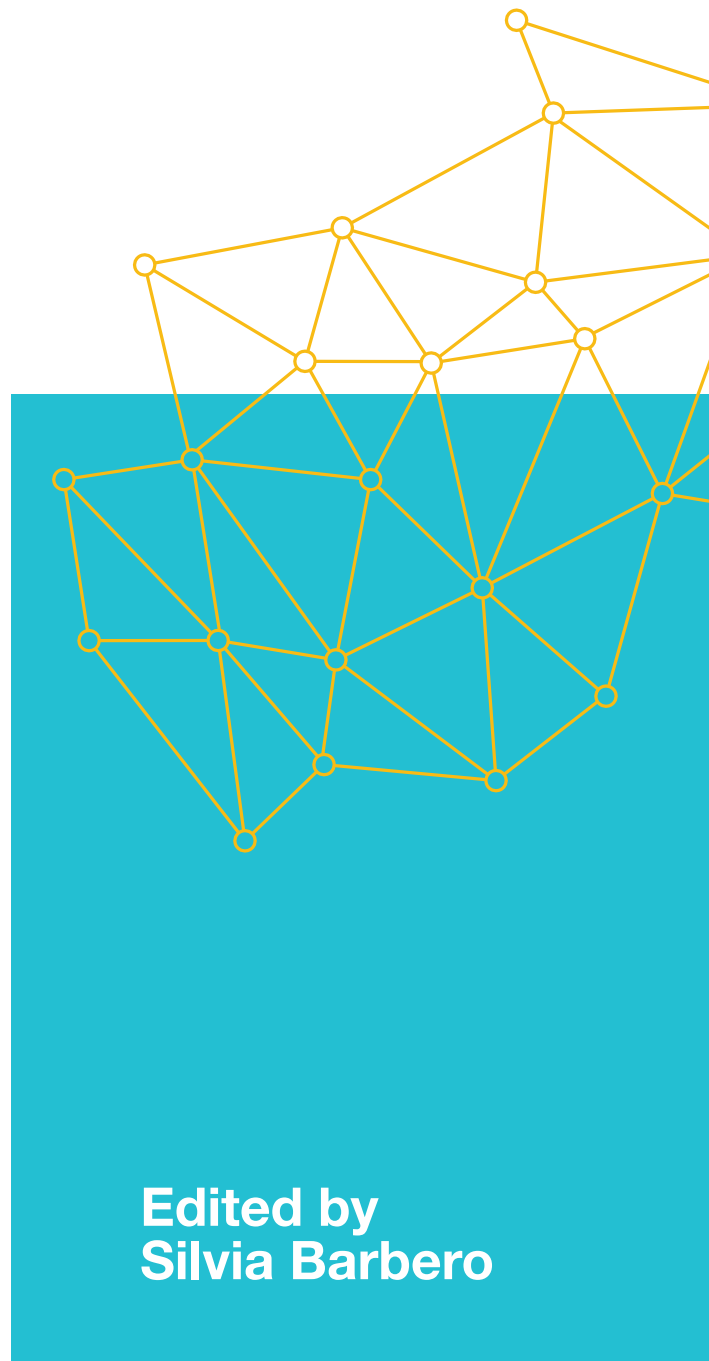
retrace



Systemic Design Method Guide for Policymaking:

A Circular Europe
on the Way

volume 1



Edited by
Silvia Barbero

Allemandi



SYSTEMIC DESIGN
METHOD GUIDE
FOR POLICYMAKING
A Circular Europe on the Way

EDITED BY
SILVIA BARBERO

Allemandi

SYSTEMIC DESIGN METHOD GUIDE FOR POLICYMAKING: A CIRCULAR EUROPE ON THE WAY

Edited by

Silvia Barbero

Preface by

Erwin Siweris

RETRACE Coordinator

Politecnico di Torino (Italy)

RETRACE Partners

Piedmont Region (Italy)

Azaro Foundation (Spain)

Beaz Bizkaia (Spain)

Higher School of Advanced Industrial Technology / ESTIA (France)

Association for Environment and Safety in Aquitaine / APESA (France)

Government Office for Development and European Cohesion Policy (Slovenia)

North-East Regional Development Agency (Romania)



Chief Editor

Silvia Barbero

Assistant Editor

Carolina Giraldo Nohra

Authors

Jocelyn Bailey

Cyril Baldacchino

Silvia Barbero

Chiara Battistoni

Luigi Bistagnino

Emanuele Bompan

Daniel Calleja Crespo

Tiziana Dell'Olmo

Marjana Dermelj

Carolina Giraldo Nohra

Jean-Michel Larrasquet

Iban Lizarralde

Ander Muñoz Urbizu

Agnese Pallaro

Pier Paolo Peruccio

Estibaliz Plaza Elordi

Marion Real

Ramona Tanasã

Paolo Tamborrini

Benjamin Tyl

Cover Design

Carolina Giraldo Nohra

Annexes Design

Chiara Battistoni

Carolina Giraldo Nohra

First Edition

ISBN 978-88-422-2444-0

© 2017 BY RETRACE PROJECT

© 2017 UMBERTO ALLEMANDI SRL

PRINTED IN TURÍN IN THE MONTH OF SEPTEMBER 2017
FOR THE UMBERTO ALLEMANDI PUBLISHING HOUSE

All rights reserved

No part of this publication may be reproduced in any manner without permission.

This publication is possible thanks to the support of Interreg Europe and the European Regional Development Fund (ERDF) in the RETRACE Project.

www.interregeurope.eu/retrace

This publication reflects the authors' views only and the Interreg Europe programme authorities are not liable for any use that may be made of the information contained therein.

Table of Contents

9	Introduction SILVIA BARBERO
1. Transition Towards a Circular Economy	
14	1.1 The Circular Economy Package. Beginning of the Transition towards a more Circular Economy DANIEL CALLEJA CRESPO
16	1.2 Circular Economy: Definition and Evolution. Principles and Development EMANUELE BOMPAN
24	1.3 The Transition of European Countries Toward a New Economy and the Role of Regions TIZIANA DELL'OLMO
35	1.4 Evolution of Interreg Europe Projects on Circular Economy MARJANA DERMELJ
43	1.5 Elements of Novelty: Designer as Policy-Maker JOCELYN BAILEY
51	1.6 Sustainable and Collaborative Innovation for the Territory PAOLO TAMBORRINI
2. Systemic Design: A Tool for An Emerging Sustainable Future	
58	2.1 A Complementary View on Complex and Systemic Approaches MARION REAL, JEAN MICHEL LARRASQUET AND IBAN LIZARRALDE

68	2.2	Systemic Design: A Historical Perspective PIER PAOLO PERUCCIO
75	2.3	Systemic Design: Methodology and Principles LUIGI BISTAGNINO
83	2.4	Systemic Design as Effective Methodology for the Transition to Circular Economy SILVIA BARBERO
	3.	The RETRACE Project
92	3.1	Overview of the RETRACE Project RAMONA TANASĂ
101	3.2	Involved Actors CYRIL BALDACCHINO AND BENJAMIN TYL
	4.	The Methodology of the RETRACE Project
112	4.1	Exchange of Experiences CHIARA BATTISTONI, CAROLINA GIRALDO NOHRA, AGNESE PALLARO AND ANDER MUÑOZ URBIZU
135	4.2	Communication and Dissemination ESTIBALIZ PLAZA ELORDI, MARION REAL AND MIKELE LARRONDE
140		Conclusion SILVIA BARBERO
143		Annexes
179		Glossary
185		Authors' Biographies

Annexes

Italy

PIEDMONT



TOTAL AREA: **2.538.700 ha**

2010

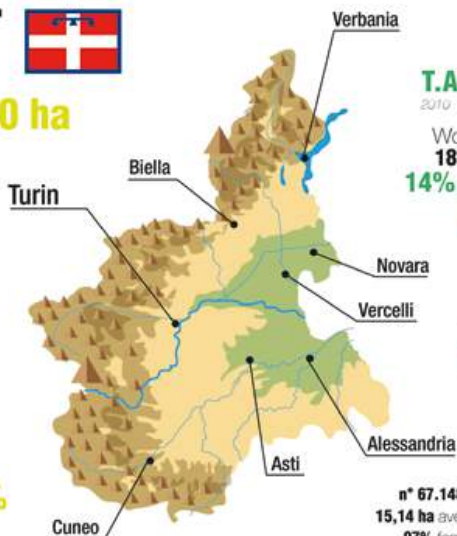


Mountains **43,3%**

Hills **30,3%**

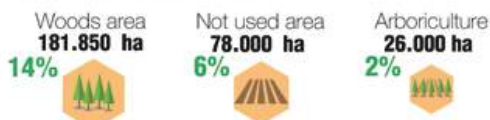
Flat area **26,4%**

Artificial area: **183.082 ha** **7%**



geography

T.A.A (Total Agricultural Area): **1.299.007 ha** **51%**
2010



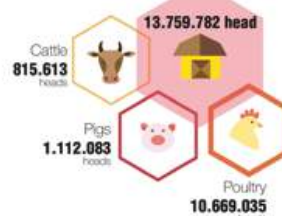
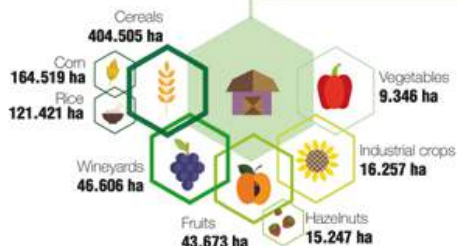
Agriculture area (U.A.A.): **1.013.157 ha** **78%**



Area for pasture **371.350 ha**

n° **67.148** Crop Farms
15,14 ha average (U.A.A)
97% family managed

n° **19.724** Breeding Farms
n° 52 head average
97% family managed



Italy

PIEDMONT

Population (inhabitants)

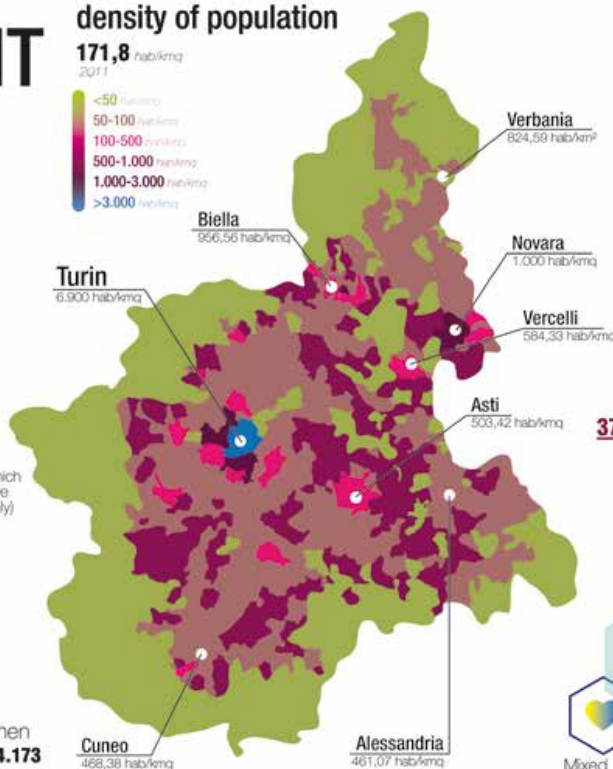
4.424.467

2015

density of population

171,8 hab/kmq

2011



demography

family composition

2,2 Average number of people in a family
2013

TOTAL FAMILY UNITS **1.953.360**
2011

MAIN CATEGORIES

591.709 **246.850**



374.659

671.901

marriage

Marriages **12.599**
2013

Divorces and separation **12.152**
2012



+ 0,9 Mortality variation last 30 years



46,2 Average age of population
2014

30,1 Average age at which young people leave parents' house (Italy)

- 0,3 Nativity variation last 30 years

152 Child adoption
2013

Men **2.140.294**
2015

Women **2.284.173**
2015

Italy PIEDMONT

demography

employment

Variation of total employment rate
Working age 20-64



Variation of total unemployment rate
Working age



1.347.299 employees
2013



Average income per year

23.616 €
2011



Average income per age - ITALY
2015 (median equivalized net)

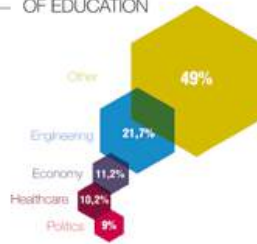


education

SCHOOLING RATE
41%
2013



VOCATION OF EDUCATION



NUMBER OF EDUCATION LEVELS & UNITS



migration

Rate of Emigration
+ 4,4 %
last 30 years



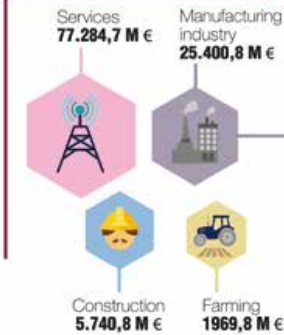
Rate of Immigration
+ 5 %
last 30 years



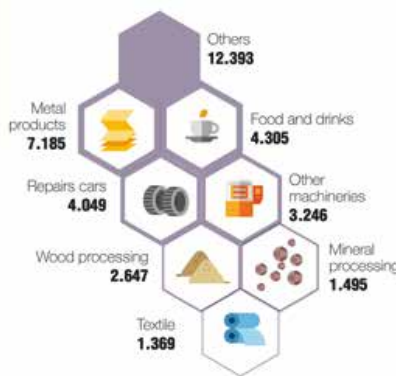
Italy PIEDMONT

economy

MAIN ECONOMIC / INDUSTRIAL SECTORS

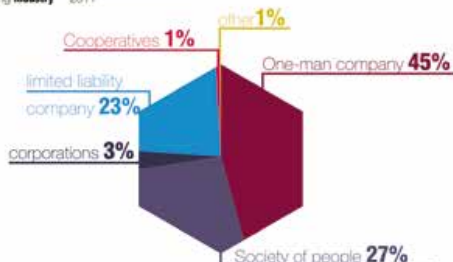


MANUFACTURING INDUSTRY 36.689 UNIT



INTERNAL ORGANIZATION OF INDUSTRY

Manufacturing industry 2011



NUMBER OF INDUSTRIES
MANUFACTURING SECTORS 2011

EMPLOYEES

1-15	Micro	34.177
15-49	Small	2.678
50-249	Medium	1.013
+250	Large	156

NUMBER OF EMPLOYEES
MANUFACTURING SECTORS 2011

1-15	114.904
15-49	71.161
50-249	99.237
+250	105.659

Italy PIEDMONT

influences



culture

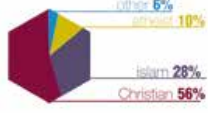
traditions by season



languages



religion



sport



notable residents

industrial- politician- religious



folklore

instruments



authors - musician- artist



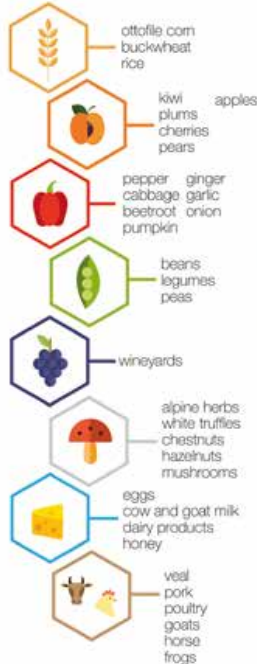
dances



Italy PIEDMONT

culture gastronomy

food resources



traditions

MERENDA SINOIRA (afternoon snack):
bread, salami, cheese, fruit, wine



recipes



Italy

PIEDMONT

architecture
styles/
urban patterns



Landmarks



crafts



culture

craft districts



Italy

PIEDMONT

Torino 1st main city

foundation by Romans
Taurasia
III century B.C.

1st capital of Italy
in 1861-1865

1280
part of Savoy
County

roman colony
by Augusto
Augusta Taurinorum
in I century B.C.

Middle Ages
center of
Longobardo Duchy

890.529
2015

population

Women
466.848

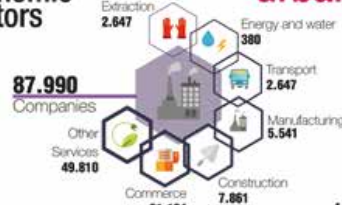
Men
423.681

Immigrants
rate **81,5**

universities

2
University of Torino
Politecnico di Torino

economic sectors
2013



urban centres

326.214
employees

cultural events



main infrastructures



churches
catholics



Italy PIEDMONT Novara

2nd city of Piedmont for population

founded by Celts in **89 B.C.**

domain by:
Romans;
Longobard;
Visconti; Sforza;
Habsburg Empire;
Savoia; Austrian

Located between Vercelli and Milano

104.380
2015
population



universities

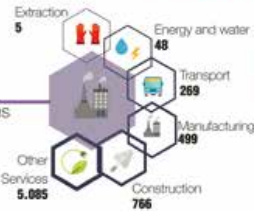
1 university pole
Perrone



economic sectors

2013

8.668
Companies



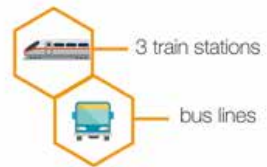
urban centres

32.053
employees

cultural events

Novara Carnival February

main infrastructures



churches

catholics

Italy PIEDMONT Alessandria

long siege by imperial forces

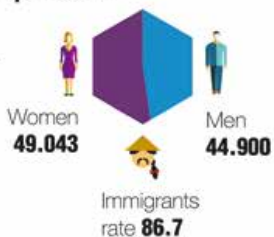
Founded in **XII century**

domain by:
Romans;
Visconti,
Milano duchy;
French; Austrian;
Savoia

battle of Marengo

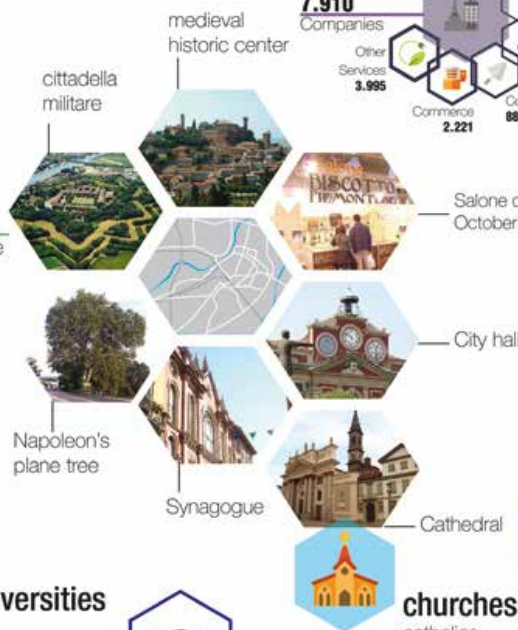
strategic position:
at the center of triangle
Torino-Milano-Genova

93.943
2015
population



universities

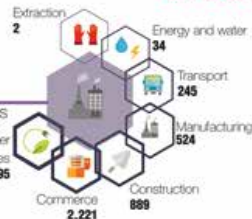
2
Piemonte orientale
Politecnico di Torino



economic sectors

2013

7.910
Companies

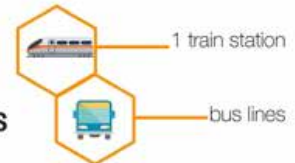


urban centres

29.385
employees

cultural events

main infrastructures



churches

catholics

Italy PIEDMONT Asti

Founded by Romans
1935 detached from Alessandria province

domain by: Romans; Longobard; Napoli; Orleans; Savoia
in the middle of wine hills, heart of Piedmont

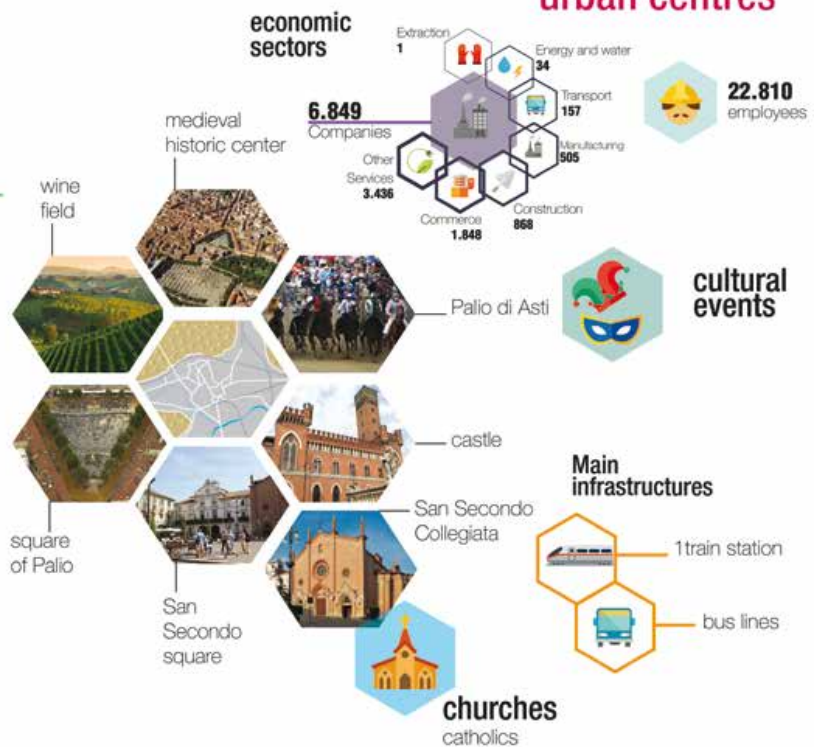
population

76.202 (2015)

Women 39.887

Men 36.315

Immigrants rate 103.7



Italy PIEDMONT Cuneo

come from carolingia city Auriate
Partisan center
was capital of 'piemonte provenzale'

domain by: Angioini; Romans; Visconti; Savoia; French-spanish

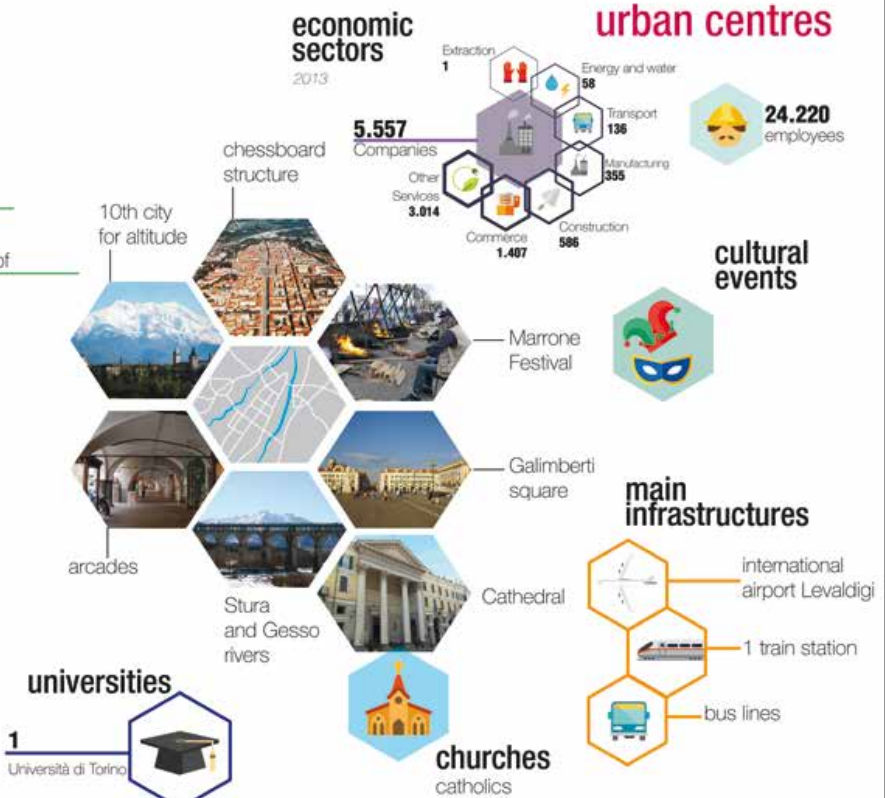
population

56.081 (2015)

Women 29.273

Men 26.808

Immigrants rate 91.8



Italy PIEDMONT Vercelli

founded by Celts,
Wehr-Celt

stop on the way
of via francigena

domain by:
Romans;
longobard;
Visconti;
Savoia;
Spanish

European
capital of rice

46.754
2015

population



Immigrants
rate **72,2**

universities

1
Piemonte orientale



economic sectors 2013

3.902
Companies

Other
Services
2.075

Extraction
1

Energy and water
22

Transport
85

Manufacturing
222

Commerce
1.110

Construction
387

urban centres

12.277
employees

medieval
historic center

Cavour
square



Visconte
castle

synagogue



museum
Arca

Basilica
Sant'Andrea

churches
catholics

La Panissa vercellese
Sagra d'la Panissa

cultural events



main infrastructures

1 train station

bus lines

Italy PIEDMONT Biella

Foundation
826

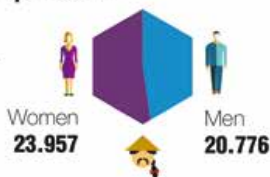
important place
for the industrial
revolution after
the war with Piaggio

domain by:
Romans;
Longobards,
French;
Savoia

First modern
wool factory

44.733
2015

population



Immigrants
rate **52,6**

universities

1 campus
University of Turin
Politecnico di Torino
Università del Piemonte Orientale



economic sectors 2013

5.536
Companies

Other
Services
3.233

Extraction
1

Energy and water
36

Transport
69

Manufacturing
354

Commerce
1.441

Construction
402

urban centres

18.759
employees

at the foot
of Alpes

the road
of the wool



Santuario
Oropa

Baptistry



Cathedral

funicular

Biella Festival Autori
October

cultural events



main infrastructures

1 train station

bus lines

touristic airport
Biella-Cerrione

Spain - Basque Country

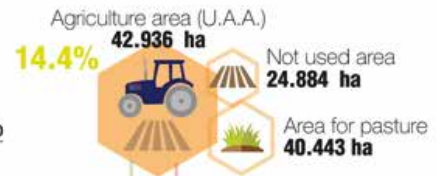
BISCAY

TOTAL AREA: **221.232 ha**

geography

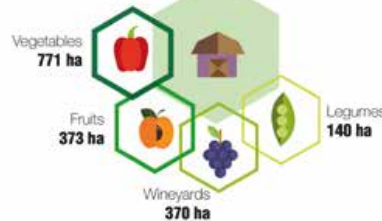


Mountains **40%** Hills **40%** Flat area **20%**



n° **7.049** Crop Farms
3,94 ha average
62% one man company

n° **8.503** Breeding Farms
107 head average
62% one man company



Spain - Basque Country

BISCAY

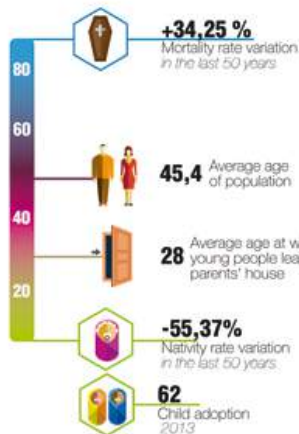
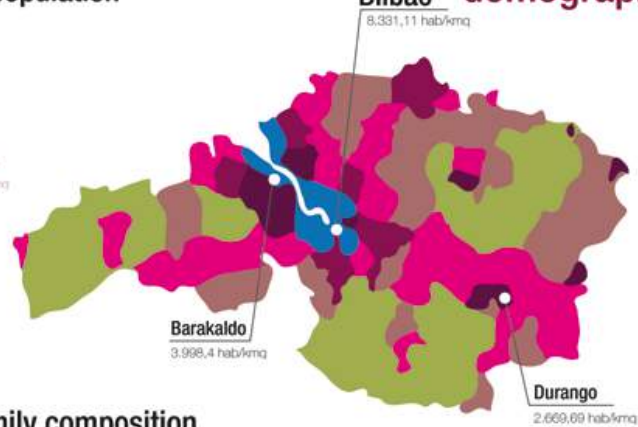
Population (inhabitants)
1.141.442
2015

density of population

515,36 hab/kmq
2015



demography



Men **549.984** 2015

Women **591.458** 2015

family composition

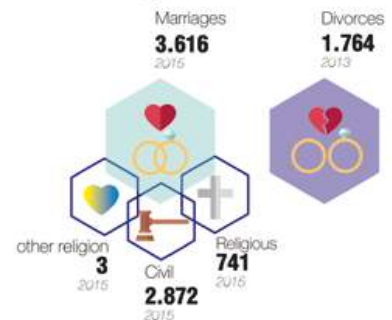
-5,9 Average number of people in a family variation in the last 50

TOTAL FAMILY UNITS **551.600**

MAIN CATEGORIES



marriage



Spain - Basque Country BISCAY

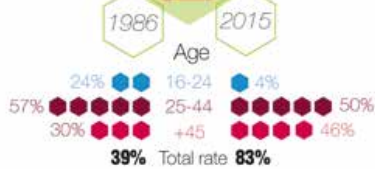
demography

employment

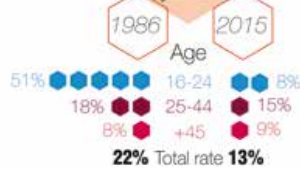
463.009 employees 2015



Variation of total employment Working age



Variation of total unemployment Working age



Average income / Month per job type



Average income per Age 2013

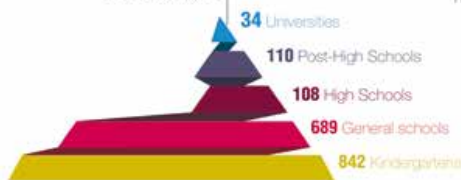


education

SCHOOLING RATE

-26,95% 1981-2014

NUMBER OF EDUCATION LEVELS & UNITS

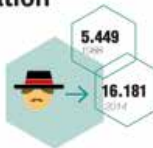


VOCATION OF EDUCATION



migration

Rate of Emigration +197% last 30 years



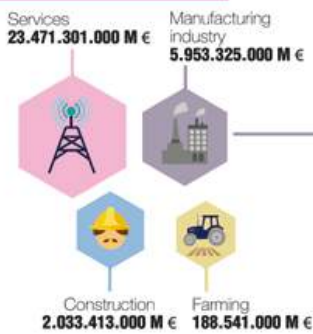
Rate of Immigration +511% last 30 years



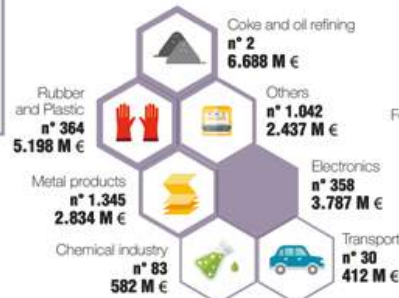
Spain - Basque Country BISCAY

economy

MAIN ECONOMIC / INDUSTRIAL SECTORS



MANUFACTURING INDUSTRY 80.321 UNIT

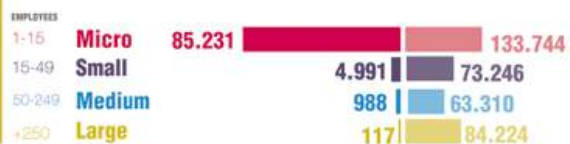


INTERNAL ORGANIZATION OF INDUSTRY

Manufacturing industry 2015



NUMBER OF INDUSTRIES MANUFACTURING SECTORS 2015



Spain - Basque Country BISCAY

traditions by season

spring - Easter Catholics processions

summer - Nostalgic Basque Urban Street dancing (Bata)

autumn - All Saints' Day

winter - Visit a giant nativity scene
- Christmas
- New Year's Eve
- January 5 Three Kings Parties

folklore

instruments

dances

influences



languages



religion



sport



notable residents

industrialist - politician - religious

authors - musician - artist

culture

Spain - Basque Country BISCAY

food resources

- wheat, barley, corn, oats
- peaches, cherries, apples, pears
- pepper, carrot, tomato, pumpkin
- mushrooms, garlic, onion
- beans, legumes, peas
- wineyards
- sardines, anchovies, tuna, crab
- eggs, cow, sheep and goat milk, dairy products, honey
- veal, pork, poultry, goats, wild boar

traditions

Eating pintxos at 12pm going from a bar to another bar.



recipes

3 STAR Michelin Guide destination

culture

Spain - Basque Country

BISCAY

architecture



museums

- Guggenheim Museum Bilbao
- Bilbao Fine Arts Museum
- the Basque Museum
- Bilbao River Maritime Museum
- Archaeological Museum of Bizkaia

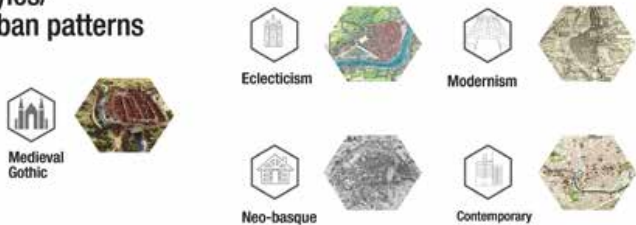
crafts



culture

traditional costumes (skirts, coats, belts, scarfs, wallet, hats.)

styles/urban patterns



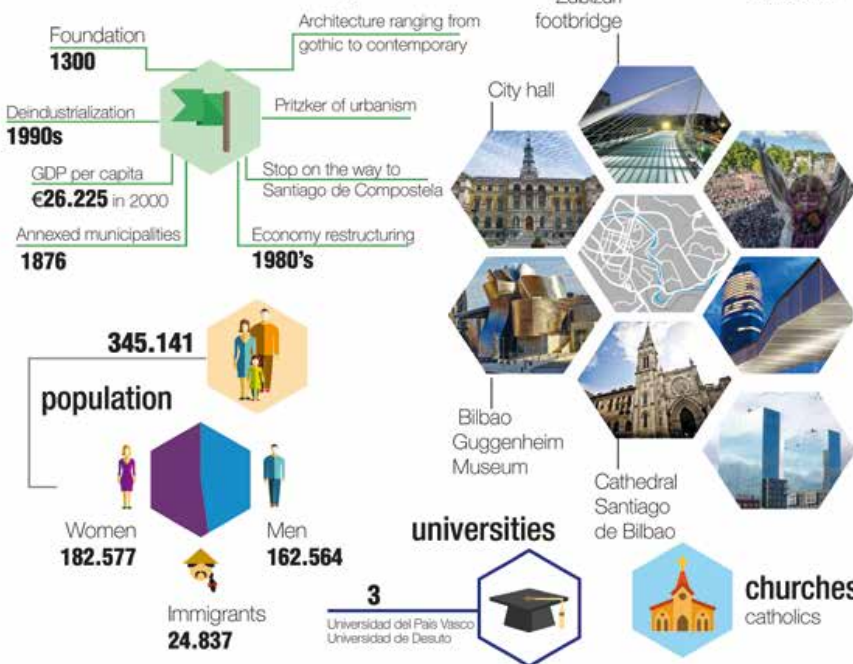
craft districts



Spain - Basque Country

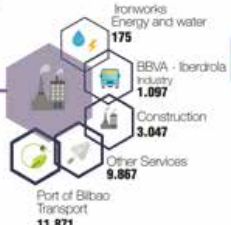
BISCAY

Bilbao 1st main city



economic sectors

32.871 Companies



urban centres

108.165 employees

cultural events



main infrastructures



Deindustrialization 1990s

GDP per capita €26.225 in 2000

Annexed municipalities 1876

Pritzker of urbanism

Stop on the way to Santiago de Compostela

Economy restructuring 1980's

population

345.141

Women 182.577

Men 162.564

Immigrants 24.837

universities

3
Universidad del Pais Vasco
Universidad de Desuto

churches catholics

Spain - Basque Country

BISCAY

Barakaldo 2nd city

Foundation
1051

Industrial recession
1980's

Developed
as an endpoint
of a mining
railway

from industrial
to core services town

Iron Works Business
major economic activity
XIX/XX century

98.403
population



economic
sectors

6.902
Companies



urban centres

28.567
employees



cultural
events

main
infrastructures



churches
catholics

Spain - Basque Country

BISCAY

Durango 3rd city

Foundation
1300

Economy restructuring
1970's

Heavy Industry
XIX/XX century

Architecture
Gothic
Neapolitan classic
Baroque
Contemporary

28.899
population



economic
sectors

1.951
Companies



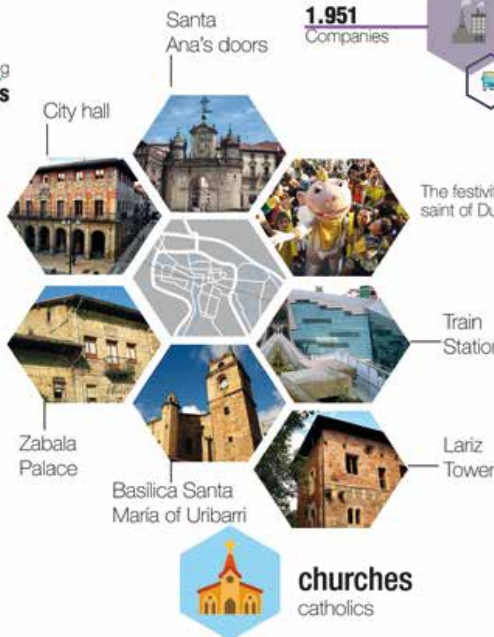
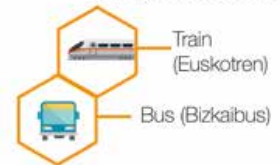
urban centres

7.798
employees



cultural
events

main
infrastructures



churches
catholics

BISCAY Spain - Basque Country

bibliography /webography

consultation date: from september 2016 to december 2016

geography

<http://en.eustat.eus>
<http://www.nasdp.ejgv.euskadi.eus>
<https://en.wikipedia.org/wiki/>
<http://www.ign.es>

demography

map: interpretation of the map retrieved from www.ksabarna.com

<http://www.eustat.eus>
<http://www.ine.es>
<http://www.euskadi.eus>
<http://www.elcomercio.com/bizkaia>
<http://www.bizkaia.eu>
<http://en.eustat.eus>
<http://www.mecd.gob.es>

economy

data from register of company
<http://www.eustat.eus/temas/05>
<http://www.bizkaialent.eus>

culture

<http://www.kultura.ejgv.euskadi.eus>
<http://www.bilbaoTurismo.net>
<https://en.wikipedia.org/>
<http://www.euskomedia.org>
<http://www.kultura.ejgv.euskadi.eus>
<https://ec.europa.eu>
<http://www.kultura.ejgv.euskadi.eus>
<https://es.wikipedia.org/>
<http://www.bizkaialent.eus>
<http://www.elmundo.es>
<http://peopleofoureverydaylife.com>
<http://www.bizkaialent.eus>
<http://www.bizkaialent.eus>
<http://www.bilbaoTurismo.net>

urban centers

<http://garpen.net>
<http://www.bilbaoTurismo.net>
<https://es.wikipedia.org/wiki/>
<http://www.eustat.eus>
<http://www.durango-udsia.eus>
<http://www.camarabilbao.com>

France

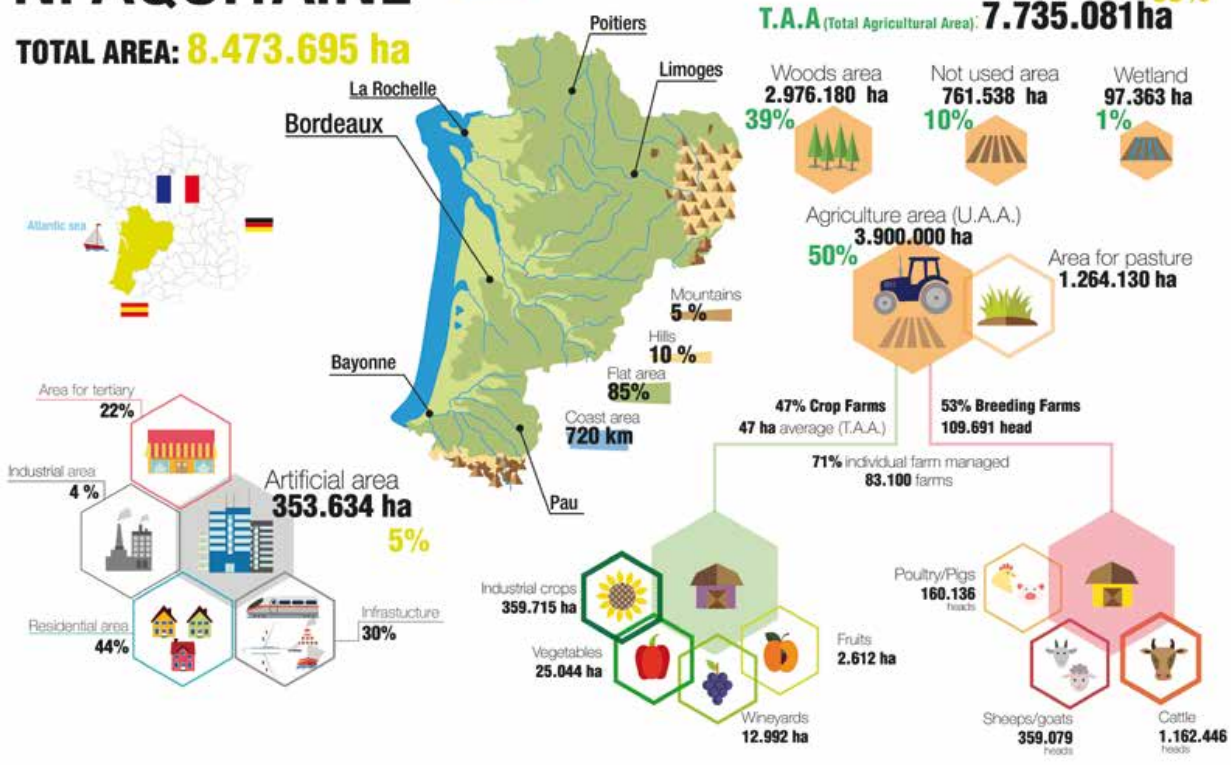
N. AQUITAINE

RÉGION NOUVELLE-AQUITAINE

TOTAL AREA: **8.473.695 ha**

geography

T.A.A (Total Agricultural Area): **7.735.081 ha** ^{95%}



France

N. AQUITAINE

density of population
70 hab/kmq

demography

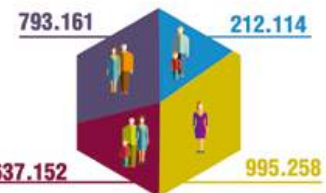
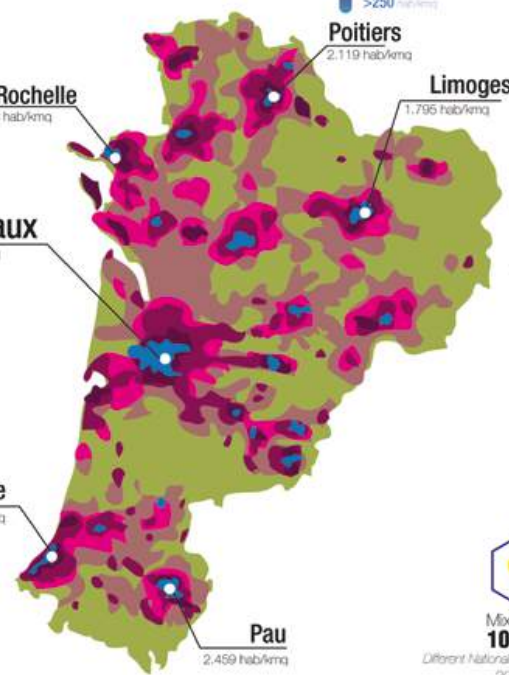
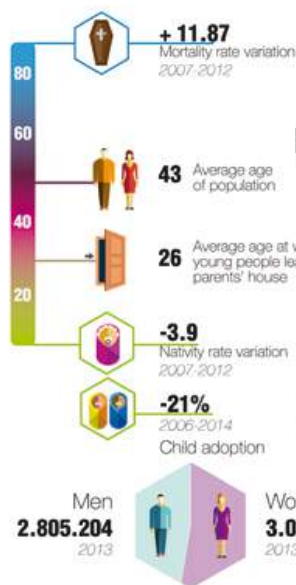
family composition

2,1 Average number of people in a family

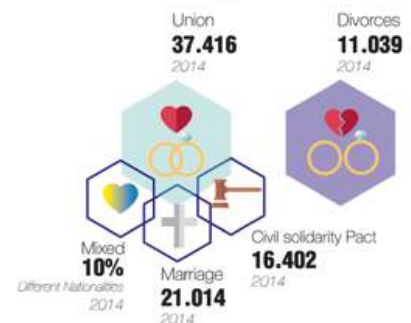
MAIN CATEGORIES

TOTAL FAMILY UNITS: **2.637.685**

Population (inhabitants)
5.844.176
2013



marriage



France N. AQUITAINE

2.345.400 employees 2015



demography

employment



education

SCHOOLING RATE
90%



VOCATION OF EDUCATION



NUMBER OF EDUCATION LEVELS & UNITS



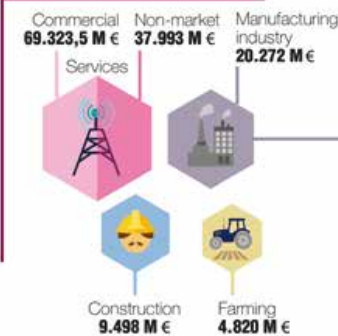
migration



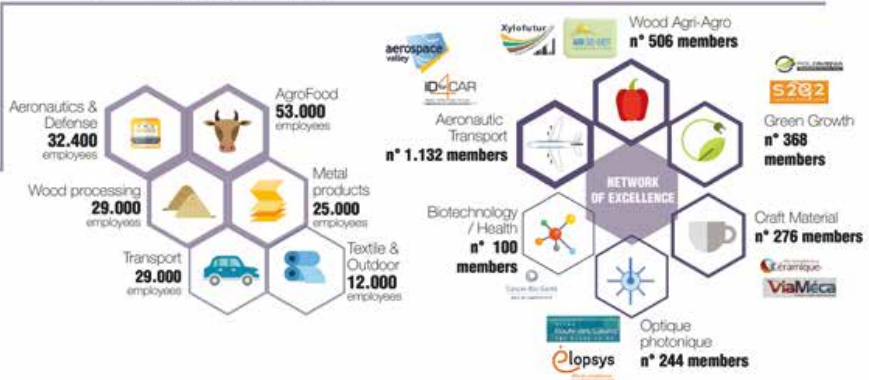
France N. AQUITAINE

economy

MAIN ECONOMIC / INDUSTRIAL SECTORS

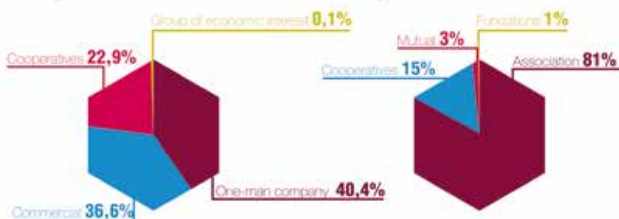


MANUFACTURING INDUSTRY 36.898 UNIT



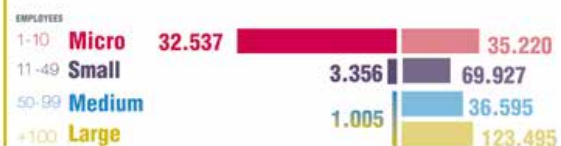
INTERNAL ORGANIZATION OF INDUSTRY

Manufacturing Industry 2016



NUMBER OF INDUSTRIES

Manufacturing Industry 2013



NUMBER OF EMPLOYEES

Manufacturing Industry 2013

France

N. AQUITAINE

influences



culture

traditions by season



languages



religion



sport



notable residents

industrialist- politician- religious



folklore

instruments



dances



authors - musician- artist

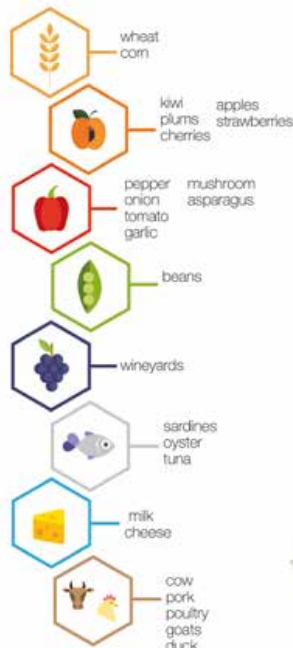


FRANCE

N. AQUITAINE

culture gastronomy

food resources



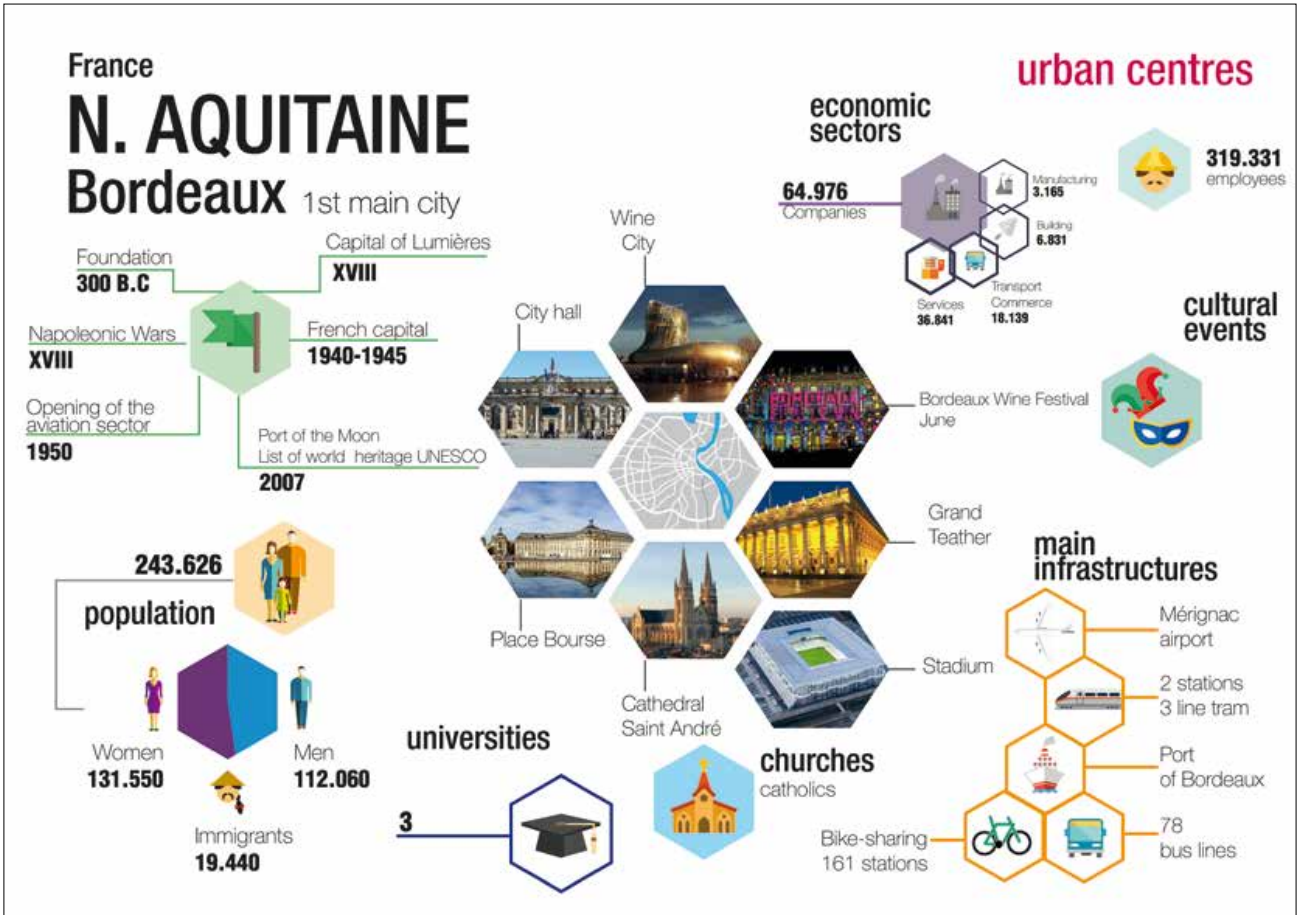
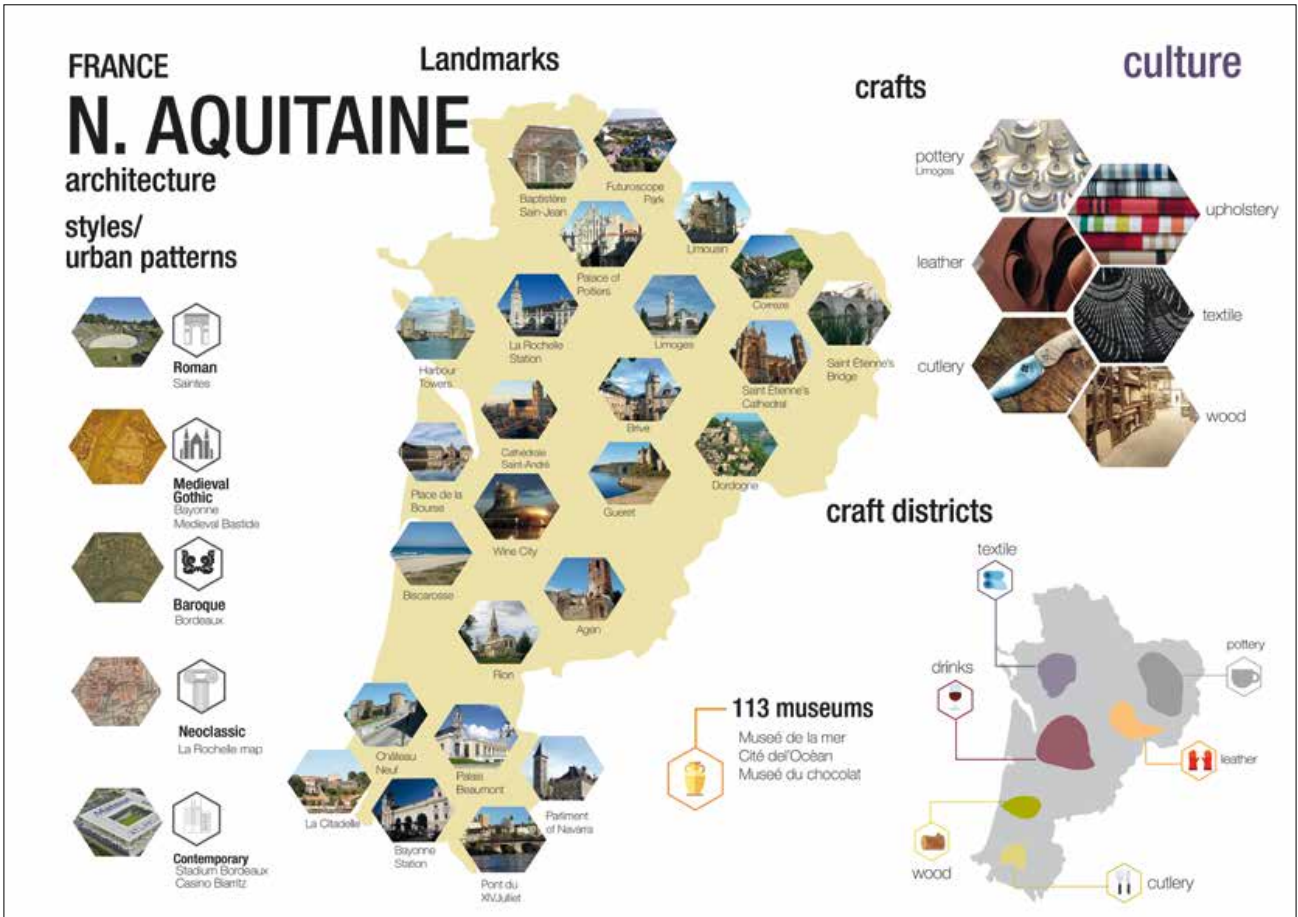
traditions

Eat Tapas and watch Rugby



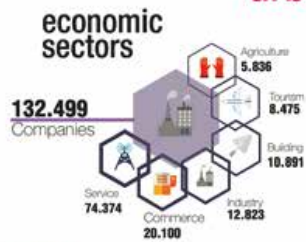
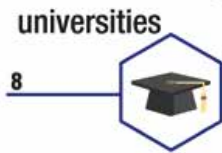
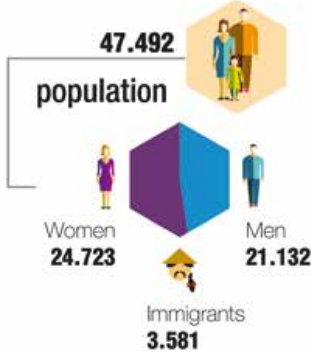
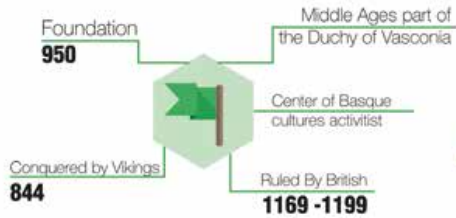
recipes





France

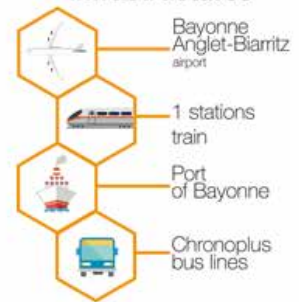
N. AQUITAINE Bayonne 2nd city



urban centres



main infrastructures

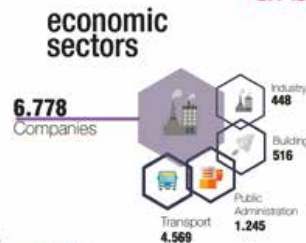
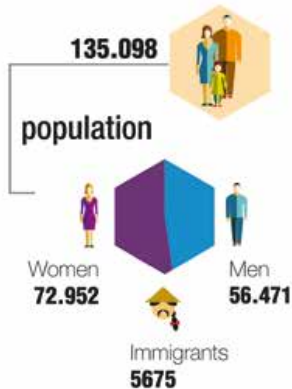
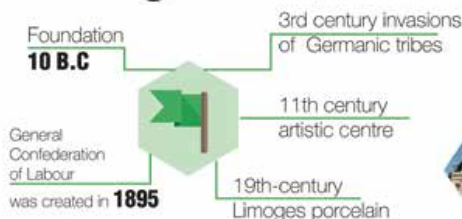


churches
catholics



France

N. AQUITAINE Limoges 3rd city



urban centres



main infrastructures



churches
catholics



France

N. AQUITAINE Poitiers 4th city

Foundation **1 B.C** Garrison town **XIX century**

Hundred Years' War, Battle of Poitiers **1356**

Major university centre Industrial decentralisation **1970s**

87.427
population



universities

1
biggest university town in France



economic sectors

4.151
Companies



urban centres

103.740
employees

Film Festival December

cultural events

main infrastructures

Poitier Airport

TGV Atlantique

bus lines

churches catholics

France

N. AQUITAINE La Rochelle 5th city

Foundation **X century** Renaissance Protestant Orientated

Templers largest base

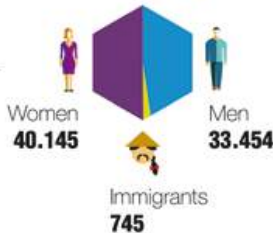
Siege of La Rochelle **1627-1628**

Largest French harbour on the Atlantic coast, until the 15th century

Ruled By British **1360-1372**

Submarine base **WWII**

74.344
population



universities

8



economic sectors

6.089
Companies



urban centres

80.833
employees

Les Francofolies July

cultural events

main infrastructures

airport La Rochelle Ile de Re

1 train station

3 Ports Atlantic

bus lines

churches catholics

Bike-sharing

France

N. AQUITAINE

Pau 6th city

Foundation **12 B.C**

Capital of Béarn **1464**

Winter resort town **1920**

Seal of the Kings of Navarre **1512**

The first balloon/plane flights **1844-1909**

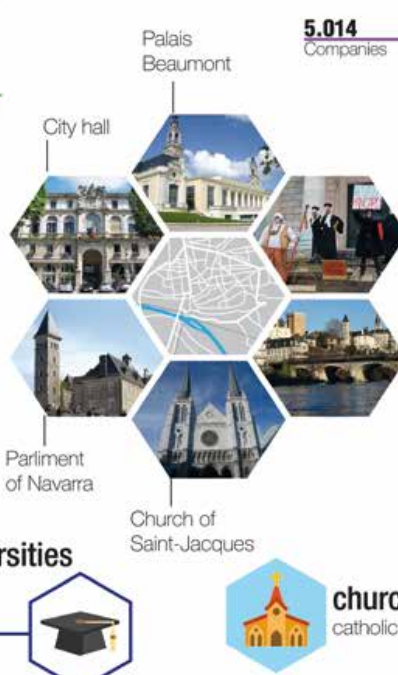
77.575

population

Women **41.890**

Men **35.684**

Immigrants **5674**



urban centres

economic sectors

5.014 Companies

Industry **207**

Building **340**

Public Administration **1.085**

Transport **3.382**

80.833 employees

cultural events

Carnival Biarnés

Pont du XIV Juillet

main infrastructures

Airport of Pau-Pyrénées

TGV Intercity trains

Urban transport IDELIS network

universities

1

churches catholics

N. AQUITAINE France

bibliography /webography

consultation date: from september 2018 to december 2018

geography

<http://agreste.agriculture.gouv.fr/IMG/pdf/teru2015T2teru.pdf>
www.wikipedia.fr

demography

data from CCI Aquitaine 2016, Panorama Web CCI Aquitaine 2015

<https://fr.wikipedia.org>
www.insee.fr
www.limonde.fr
<http://beta.bdm.insee.fr>
www.adoption.gouv.fr
<http://aquitaine.cci.fr>

Map: elaboration of the map retrieved from: <http://www.pigma.org/>

economy

data from Panorama CCI AQUITAINE 2016
data from insee Clap 2013
data from CCI ALPC document

www.verif.com
www.aftv.org
larigion-dlpc.fr
www.coop-aquitaine.coop
www.coopdefrance.coop

culture

data from ESTIA Partners

www.osbetrama.org/
<https://fr.wikipedia.org>
gastronomie.aquitaine.fr/
www.savoirfaire-gronde.fr/
[/www.insee.fr](http://www.insee.fr)
www.scsdaqui.com
<http://leuskadi.net.free.fr>
<http://melandainiballet.com>
www.culturecommunication.gouv.fr

urban centers

www.insee.fr
www.bordaux-tourisme.com
<https://fr.wikipedia.org>
www.infobcc.com
www.u-bordaux.fr
<http://darwin.camp>
www.bayonne.cci.fr
<http://www.la64.fr>
<http://www.chronoplus.eu>
www.bayonne.fr
<http://www.dke.eus.fr>
www.voyagesphotosmaru.com/economie_potiers.html
www.ville-larochele.fr/economie.html
www.intersaute.com/Ville/potiers/Ville-63194/demographie

SLOVENIA



TOTAL AREA: **2.073.000 ha**

geography

T.A.A (Total Agricultural Area) **491.414 ha** ^{24%}

Mountains **11%** Flat area **16%** Hills **75%**

Woods area **1.182.016 ha**

Not used area **17.726 ha**

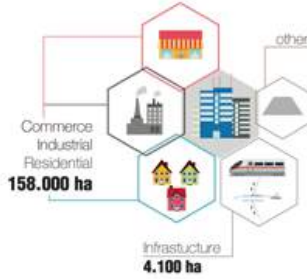
Not fertile land **15.060 ha**



Agriculture area (U.A.A.) **476.682 ha**

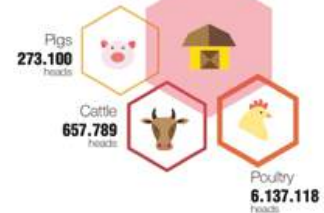
Area for pasture **274.251 ha**

Artificial area: **720.000 ha** ^{35%}



n° 72.377 Crop Farms
6,8 average ha (SAT)
family management

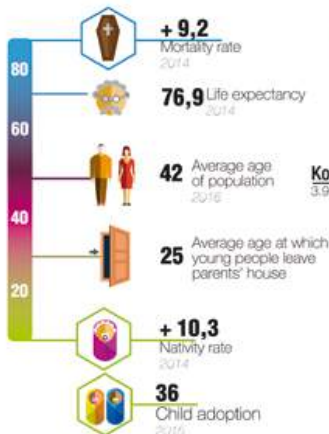
n° 55.814 Breeding Farms
130 head average
n.d. management



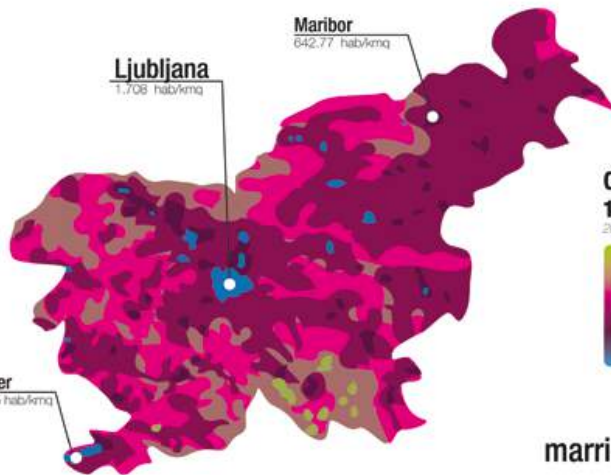
SLOVENIA

Population (inhabitants)
2.064.241
2016

demography



Men **1.023.872** Women **1.040.369**



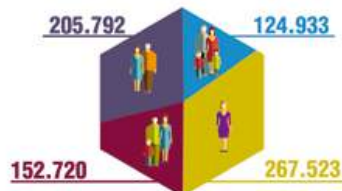
density of population
101,6 hab/kmq
2000



family composition

2,47 Average number of people in a family TOTAL FAMILY UNITS **820.541**

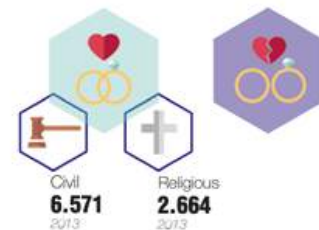
MAIN CATEGORIES



marriage

Marriages **6.571**
2014

Divorces **2.469**
2014



SLOVENIA

demography

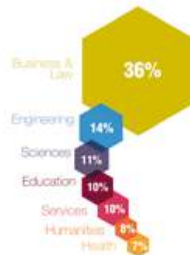
employment



education



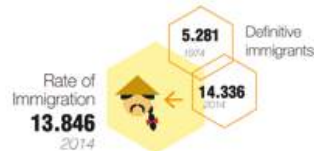
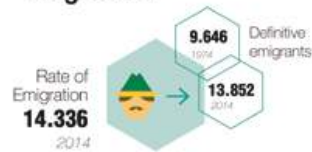
VOCATION OF EDUCATION



NUMBER OF EDUCATION LEVELS & UNITS 2015-2016



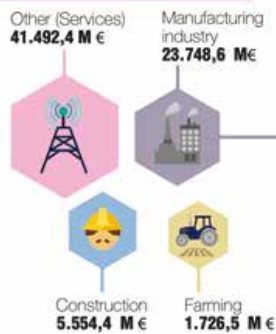
migration



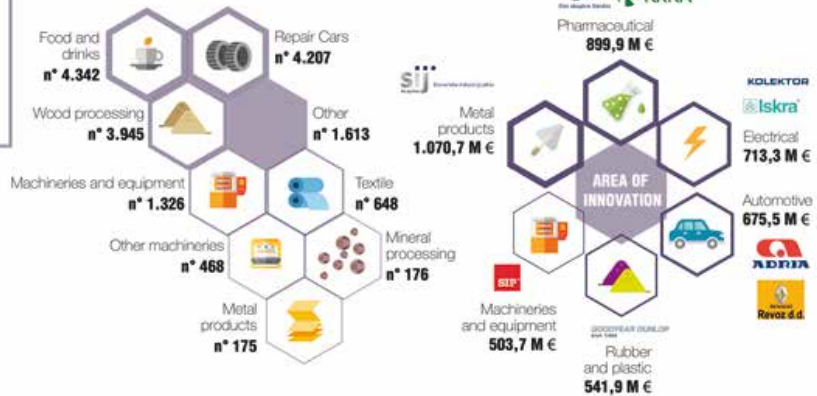
SLOVENIA

economy

MAIN ECONOMIC / INDUSTRIAL SECTORS

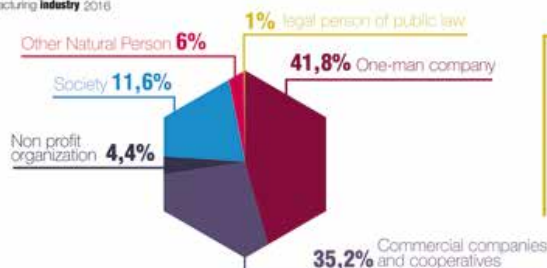


MANUFACTURING INDUSTRY 36.534 UNIT 2014



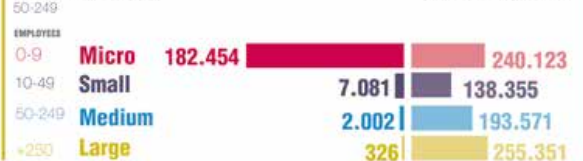
INTERNAL ORGANIZATION OF INDUSTRY

Manufacturing industry 2016



NUMBER OF INDUSTRIES

Manufacturing industry 2014



NUMBER OF EMPLOYEES

Manufacturing industry 2014

SLOVENIA

influences



culture

traditions by season

spring

- cherry feast – Goriška Brda
- carnival
- Palm Sunday
- Easter

summer

- The sheep feast in Jezersko
- 100 women go to Triglav
- Beer and flowers in Laško
- Lent festival in Maribor
- summer music festival

autumn

- The march from Litija
- St. Martin feast in Martinovance
- The Cow's Ball in Bohinj
- Grape harvest

winter

- prepare a crib
- kolodniki
- Christmas
- New Year's Eve

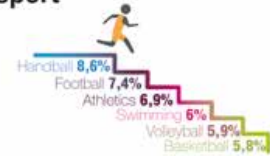
languages



religion



sport



notable residents

industrial- politician- religious



folklore

instruments



authors - musician- artist



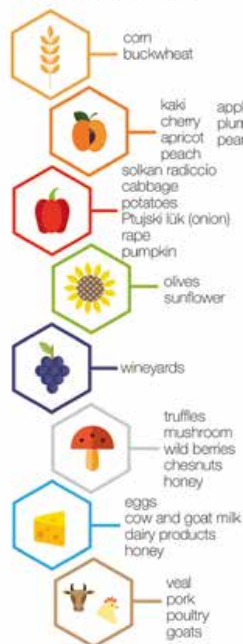
dances



SLOVENIA

culture gastronomy

food resources



recipes



traditions



SLOVENIA

landmarks

3.995 monuments



54 museums

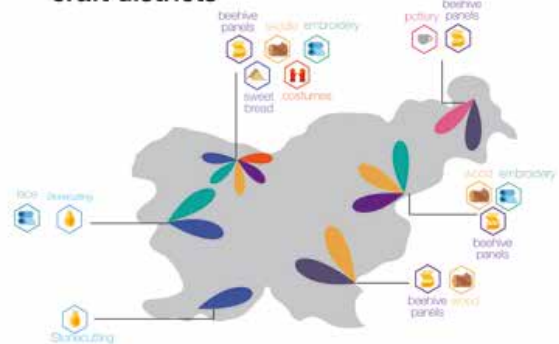
National Gallery
Museum of Modern Art

culture

crafts



craft districts



styles/ urban patterns

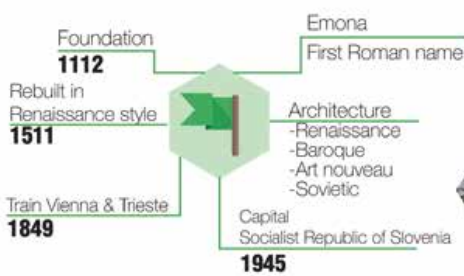


SLOVENIA

Ljubljana 1st main city

economic sectors

urban centres



cultural events

Summer Festival June

population

Women 149.323
Men 138.856

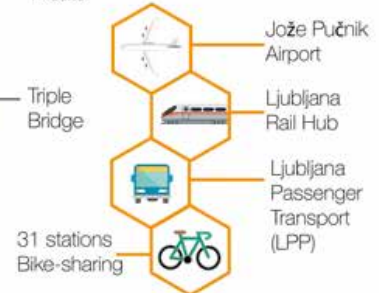
universities

1 University of Ljubljana



churches catholics

main infrastructures



SLOVENIA

Maribor 2nd city

Foundation **1204**

Markburg
First Celtic name

Bombed by the Allies **1945**

European Capital of Culture **2012**

Largest city of Lower Styria

Train Vienna & Trieste **1849**

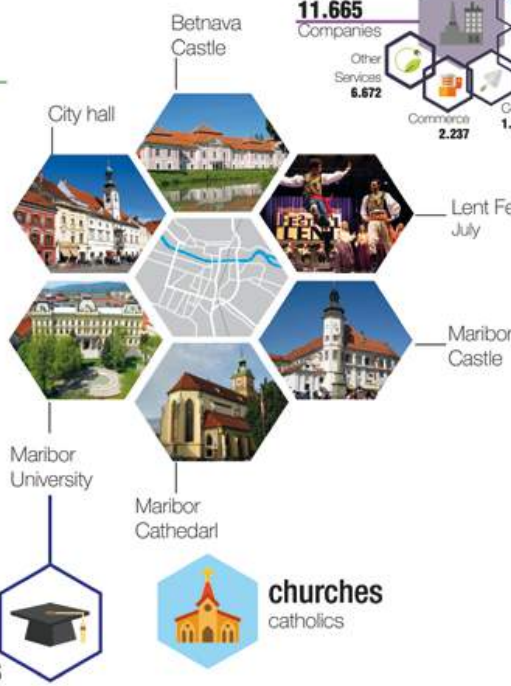
95.881

population

Women **48.951**

Men **46.930**

universities



economic sectors

11.665 Companies

Other Services **6.672**

Commerce **2.237**

Construction **1.240**

Manufacturing **1.016**

Transport **383**

Energy and water **117**

urban centres

56.164 employees

Lent Festival
July

cultural events

main infrastructures

Edvard Rusjan Airport

Railway station

Marprom bus lines

SLOVENIA

Koper 3dr city

Foundation **599**

Oldest town in Slovenia

Italian Empire **1918-1954**

Middle Ages, was an island

Venetian Republic **1279-1797**

Austrian Empire **1809-1918**

Yugoslavia **1954-1991**

25.459

population

Women **13.102**

Men **12.357**

universities



economic sectors

5.475 Companies

Other Services **3.009**

Commerce **1.145**

Construction **656**

Manufacturing **341**

Transport **295**

Energy and water **29**

urban centres

22.477 employees

Istrian Carnival
February

cultural events

main infrastructures

Port of Koper

Train station

Portorož Airport

Transport network

SLOVENIA

bibliography /webography

consultation date: from september 2016 to december 2016

geography

data from database SORS

www.wikipedia.com

demography

data from database SORS

www.stat.si
<http://pxweb.stat.si/>
www.mddur.gov.si
www.mizs.gov.si
www.wikipedia.com

map: interpretation of the map retrieved from cieszyn center <http://hedac.cieszyn.columbia.edu/gow/>

economy

data from register of company

www.stat.si
www.govk.gov.si/
www.mgri.gov.si
<http://pxweb.stat.si>

culture

www.slovenia.info
www.wikipedia.com
www.muzej-idrija-cerkno.si
www.gradmo.com
www.stat.si/doc/pub
www.kartuzija-gleterje.si
www.kgr-ribnica.si
www.rokodelstvo.si
www.jurjovanje.si
<http://tpi.net.eu>
www.zfbs.si
www.stnfolk.eu

urban centers

<http://www.ljubljana.info>
<http://maribor-pohorje.si>
<https://www.stat.si>
www.slovenia.info
www.wikipedia.com
<http://pxweb.stat.si>

Romania

NORTH-EAST

TOTAL AREA: **3.685.000 ha**

geography



Mountains **28%**

Hills **12%**

Flat area **60%**

Artificial area: **158.260 ha 5%**



T.A.A (Total Agricultural Area): **3.518.306 ha 95%**

Woods area **1.231.943 ha 35%**

Not used area **34.021 ha 1%**

Fallowed land **127.567 ha 4%**

Agriculture area (U.A.A.) **2.124.775 ha 60%**

Area for pasture **491.639 ha**

n° **790.901** Crop Farms
2,69 ha average
99% family managed

n° **496.507** Breeding Farms
31,39 head average
99% family managed

Cereals **1.162.811 ha**

Fruits **12.752 ha**

Animal feed **582.850 ha**

Vegetables **52.854 ha**

Industrial crops **142.967 ha**

Beef **515.339** heads

Pigs **550.920** heads

Poultry **12.867.214** heads

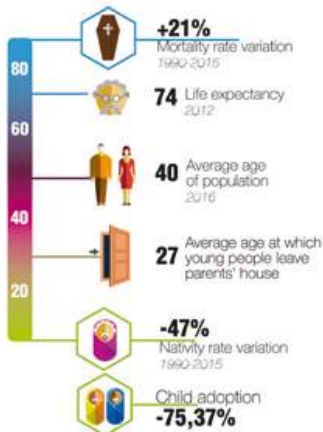
Romania

NORTH-EAST

Population (inhabitants)

3.302.217

2011



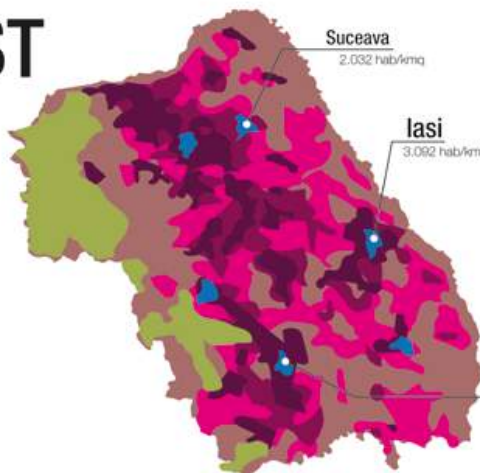
Men **1.622.817**

Women **1.679.400**

demography

density of population

100,5 hab./kmq



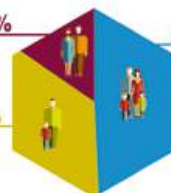
family composition

3,61 Average number of people in a family 2008-2015

15,41%

49,24%

35,35%



marriage

Marriages **20.754** 2015

Divorces **5.215** 2015

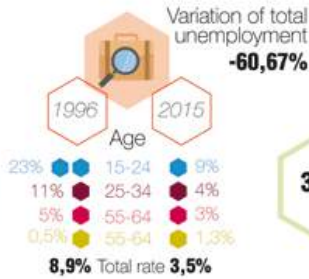
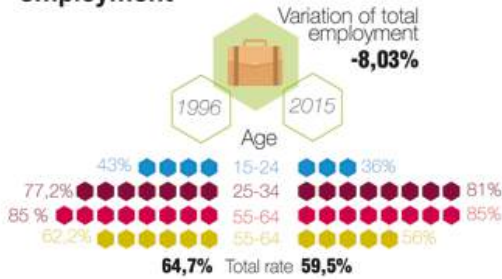


Romania NORTH-EAST

demography

employment

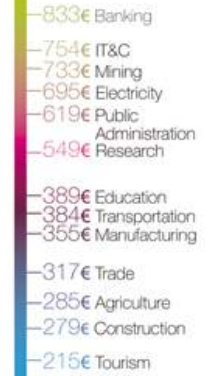
56.164 employees 2015



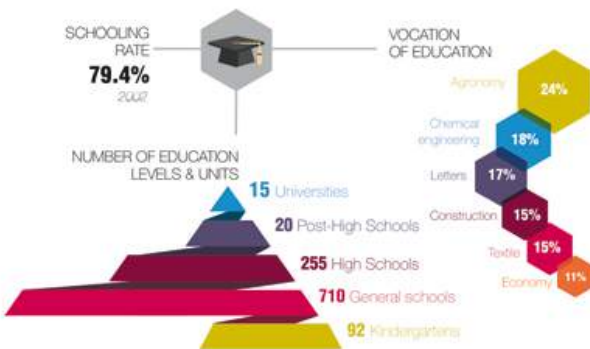
Average income per month 347 € 2015



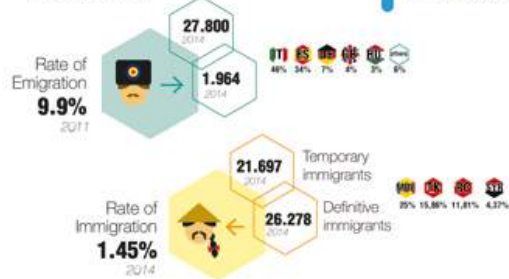
Average income/month per job type



education



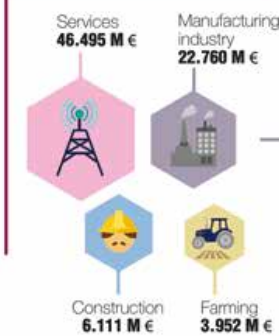
migration



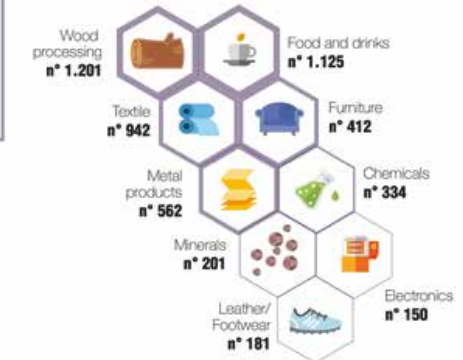
Romania NORTH-EAST

economy

MAIN ECONOMIC / INDUSTRIAL SECTORS

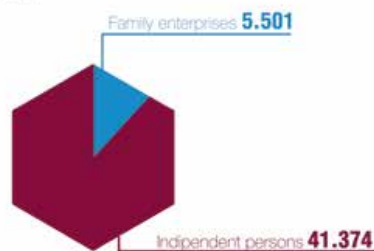


MANUFACTURING INDUSTRY 6.104 UNIT



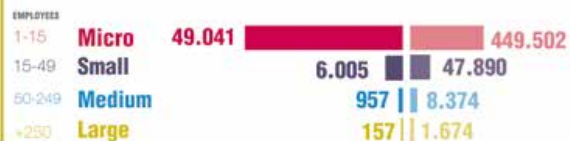
INTERNAL ORGANIZATION OF INDUSTRY

Private entrepreneurs 2015



NUMBER OF INDUSTRIES

Manufacturing Industry 2014



Romania NORTH-EAST

influences



culture

traditions by season

spring
- 1st of March celebration
beginning of spring
- Orthodox Easter

summer
24th of June: **SANZENELE**,
Universal Day Romanian
Moules

autumn
St. Andrew's (protector
of Romania)

winter
- December 1st Romania's
National Day
- Christmas
- New Year's Eve

languages



religion



sport



notable residents

industrialist - politician - religious



folklore

instruments



authors-musician-artist



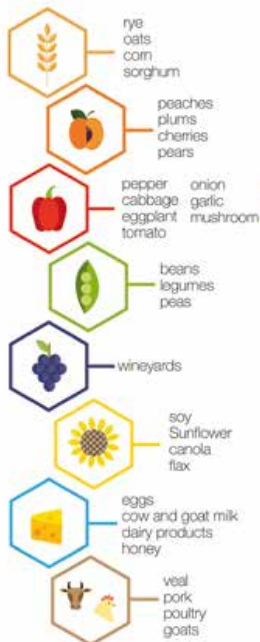
dances



Romania NORTH-EAST

culture gastronomy

food resources



recipes



traditions

Welcome guests with bread and salt, a symbol of hospitality and respect.



Romania NORTH-EAST

124 museums
Palatul Culturii
Cucuteni Museum
Unirii Palace
Celateana de Scaunifrom

crafts



culture

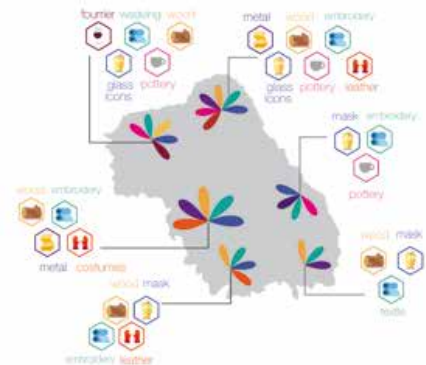
styles/ urban patterns



landmarks



craft districts



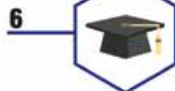
Romania NORTH-EAST Iasi

1st main city

Foundation 1230
The Cultural Capital of Romania
Oldest city in Romania
Destroyed 1513 by Tatars
1553 by Ottomans
1686 by Russian
1945 by URSS
Rebuilt in 1950

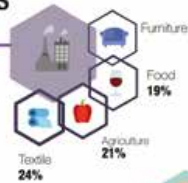
290.422
population
Women 152.871
Men 137.551
Immigrants 10.890

universities



economic sectors

17.572 Companies



urban centres

108.165 employees

cultural events

St. Parascheva pilgrimage
14th October

main infrastructures



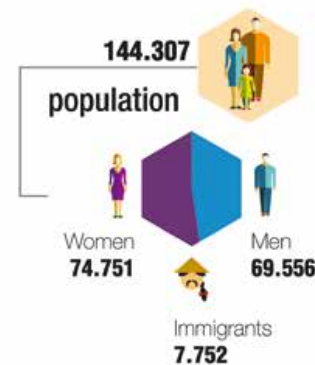
churches

Romanian Orthodox

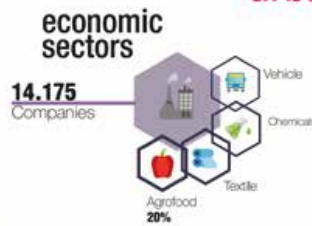


Romania
NORTH-EAST
Bacau 2nd city

Foundation **1230**
Industrial center
biggest aeronautic services factory
Architecture
-Interwar period
- socialist
Industrialized **1945**
Economy Decrease **1990**



2
universities



urban centres

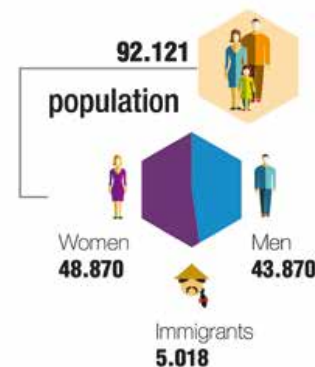
cultural events

main infrastructures

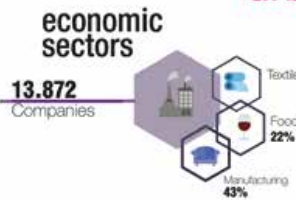


Romania
NORTH-EAST
Suceava 3rd city

Capital of Moldova **1565**
Reindustrialized in **1950**
Part of Austrian Empire **1775**
Architecture
Austrian-Hungarian
Classic neo byzantin
Humdrum
Back to Romania **1918**



2
churches
Romanian Orthodox



urban centres

36.698
employees

cultural events

main infrastructures



NORTH-EAST Romania

bibliography /webography

consultation date: from september 2016 to december 2016

geography

data from PRD 2014-2020
data from INSSE Tempo Database

www.wikipedia.it

demography

data from INSSE Tempo Database
data from EU SILC data

Map: rielaboration of the map retrieved from North-East Regional Development Agency

economy

data from PRD 2014-2020
data from INSSE Tempo Database
data received from Chamber of trade and industry

culture

data from PRD 2014-2020
data from INSSE Tempo Database

G. Ionescu, (1937). *Istoria Arhitecturii Romanesti. Din cele mai vechi timpuri pana la 1900*.
V. Florea. (2007). *Istoria artei romanesti, Bucuresti-Chisinău*. Litera International ed.
R. A. Roman. *Bucate, vinuri si obiceiuri romanesti*

www.wikipedia.it
<http://www.buildersmagazine.ro/>
<http://romaniatourism.com>
<http://spatiulconstruit.ro/>
www.bucataria-lui-radu.ro
<http://calendarulortodox.ro>
www.travelguideromania.com
<http://tradiitiobiceiuri.blogspot.ro>

urban centers

data from PRD 2014-2020
data from INSSE Tempo Database
data received from Chamber of trade and industry

<http://fasi-7coline.blogspot.ro/>
www.wikipedia.it
www.aeroport.ro
city hall web site
bacaulactiv.ro
www.aeroportsuceava.ro

© 2017 UMBERTO ALLEMANDI, TURIN

© 2017 THE AUTHORS

PUBLISHED AND PRINTED IN TURIN IN THE MONTH OF SEPTEMBER 2017
BY UMBERTO ALLEMANDI PUBLISHING

This volume aims at clarifying the role of Circular Economy according to a sustainable development and how policymakers can target it effectively in their activities. It is a guide to Systemic Design as a key methodology to establish sustainable regional action plans towards a Circular Economy.

As the result of an intense dialogue between people who present different perspectives and seek for a common language in the current complexity of policymaking and designing, this is the first of a three book series published across a four-year period (2016–2020) as part of the RETRACE Project funded by the Interreg Europe Programme.

Preface by Erwin Siweris

With contributions by

Jocelyn Bailey / Cyril Baldacchino /
Silvia Barbero / Chiara Battistoni /
Luigi Bistagnino / Emanuele Bompan /
Daniel Calleja Crespo /
Tiziana Dell’Olmo / Marjana Dermelj /
Carolina Giraldo Nohra /
Jean-Michel Larrasquet /
Iban Lizarralde / Ander Muñoz Urbizu /
Agnese Pallaro / Pier Paolo Peruccio /
Estibaliz Plaza Elordi / Marion Real /
Ramona Tanasă / Paolo Tamborrini /
Benjamin Tyl



volume 1

ISBN 978-88-422-2444-0



9 788842 224440

Partners

